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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/522,359	03/09/2000	Wadood Hamad	A-6756	3106
1726 7590 07/10/2007 INTERNATIONAL PAPER COMPANY 6285 TRI-RIDGE BOULEVARD LOVELAND, OH 45140			EXAMINER FERGUSON, LAWRENCE D	
			ART UNIT 1774	PAPER NUMBER
			MAIL DATE 07/10/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/522,359

Applicant(s)

HAMAD ET AL.

Examiner

Lawrence D. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,6,8,18,20-27,29 and 31-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,8,18,20-27,29 and 31-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/23/07
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. This action is in response to the amendment mailed April 27, 2007.

Claims 39-42 were added rendering claims 1-3, 6, 8, 18, 20-27, 29 and 31-42 pending in this case.

***Claim Rejections – 35 USC 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 38 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase, "The crack-resistant paper or board as claimed in Claim 4" is indefinite, because claim 38 depends upon a claim that has been cancelled.

***Claim Rejections – 35 USC § 103(a)***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 6, 8, 20-27, 29, 31-38 and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Elves et al* (U.S. 4,551,377).

*Elves* discloses a perforated web of textile fibers (paper) with a layer of crosslinked polymeric binder material applied to the web, where the binder material is applied in a pattern of lines (column 1, line 66 through column 2, line 7, 21-47) where the binder material is acrylic and comprises between 2% and 20% of the textile web material (column 3, lines 4-6 and 27-28). Because the polymeric binder is applied to the perforated web material, it would have been obvious to one of ordinary skill in the art for the binder material to have impregnated the material. Although *Elves* does not explicitly disclose the polymer material is impregnated in geometrical formations, the shape of the applied polymeric binder material is a design choice. In *re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). In claims 37-38, the phrase, "paper or board is calendered" introduces a process limitation to the product claim. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In *re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966.

***Claim Rejections – 35 USC § 103(a)***

6. Claims 18 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Elves et al* (U.S. 4,551,377) in view of *Tawara et al* (U.S. 4,784,917).

Elves discloses a perforated web of textile fibers (paper) with a layer of crosslinked polymeric binder material applied to the web, where the binder material is applied in a pattern of lines (column 1, line 66 through column 2, line 7, 21-47) where the binder material is acrylic and comprises between 2% and 20% of the textile web material (column 3, lines 4-6 and 27-28). Because the polymeric binder is applied to the perforated web material, it would have been obvious to one of ordinary skill in the art for the binder material to have impregnated the material. Although Elves does not explicitly disclose the polymer material is impregnated in geometrical formations, the shape of the applied polymeric binder material is a design choice. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Elves does not disclose the polymer material is polybutadiene. Tawara teaches a sheet material having fibers (column 3, lines 63-65) where the material is impregnated with thermosetting resin such as polybutadiene (column 5, lines 22-44 and column 6, lines 13-17). It would have been obvious to one of ordinary skill in the art to have used polybutadiene, as taught in Tawara, in the fibrous web of Elves because Tawara teaches impregnated polybutadiene is conventional within the art.

***Claim Rejections – 35 USC § 103(a)***

7. Claims 1-2, 6, 8, 21, 25-26, 29, 31-33 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caldwell (U.S. 5,209,965).

Caldwell discloses a porous web with an internal coating of polymer, where the amount of polymer is in the range of about 5 to about 200 weight percent of the web or fibers (column 3, line 66 through column 4, line 13). The polymer impregnant can

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include acrylic and the material may be calendered (column 11, lines 7-10 and column 45, lines 48-49). Although Caldwell does not explicitly disclose the polymer material is impregnated in geometrical formations, the shape of the applied polymeric binder material is a design choice. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

### ***Response to Arguments***

8. Applicant's arguments of the rejection made under 35 U.S.C. 103(a) as being unpatentable over Lawson et al (U.S. 4,161,422) are moot based on grounds of new rejection

### ***Conclusion***

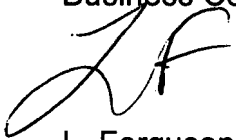
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

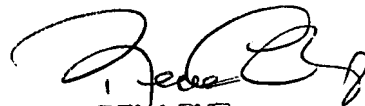
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



L. Ferguson  
Patent Examiner  
AU 1774



RENA DYE  
SUPERVISORY PATENT EXAMINER

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